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GB 2236038 A GB 2131261 A GB 0577615 A

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(71) Applicant
Shimano Inc

(Incorporated in Japan)

77 Oimatsucho 3 cho, Sakai-shi, Osaka, Japan

(72) Inventor
Masahiro Furukawa

(74) Agent and/or Address for Service
Baron & Warren
18 South End, Kensington, London, W8 5BU,
United Kingdom

(54) A telescopic butt end rod section

(57) A telescopic butt end rod section includes an auxiliary rod section 4 mounted therein to be rearwardly extendible, and a forward rod section 1 mounted in the auxiliary rod section 4 to be extendible forwardly of the butt end section 2. When the auxiliary rod section 4 is in a contained position, a forward gripping end 4A of the auxiliary rod section 4 lies adjacent a forward gripping end 2A of the butt end section 2.

FIG.1 (a)

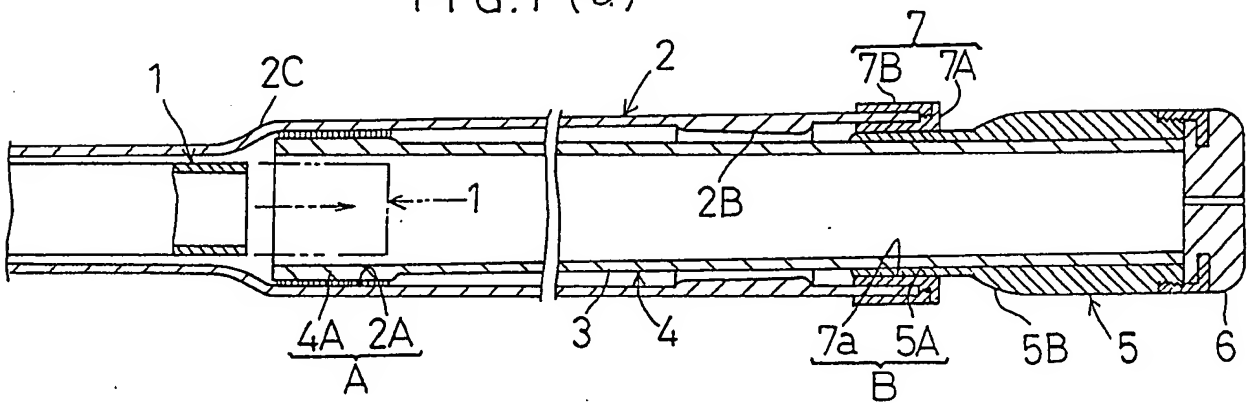

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FIG.1(a)

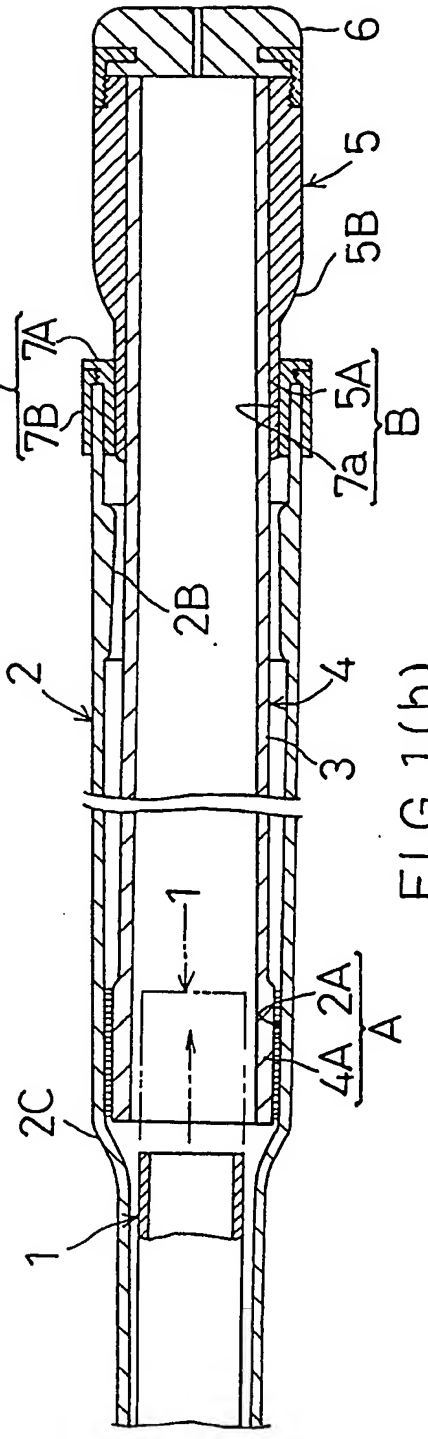
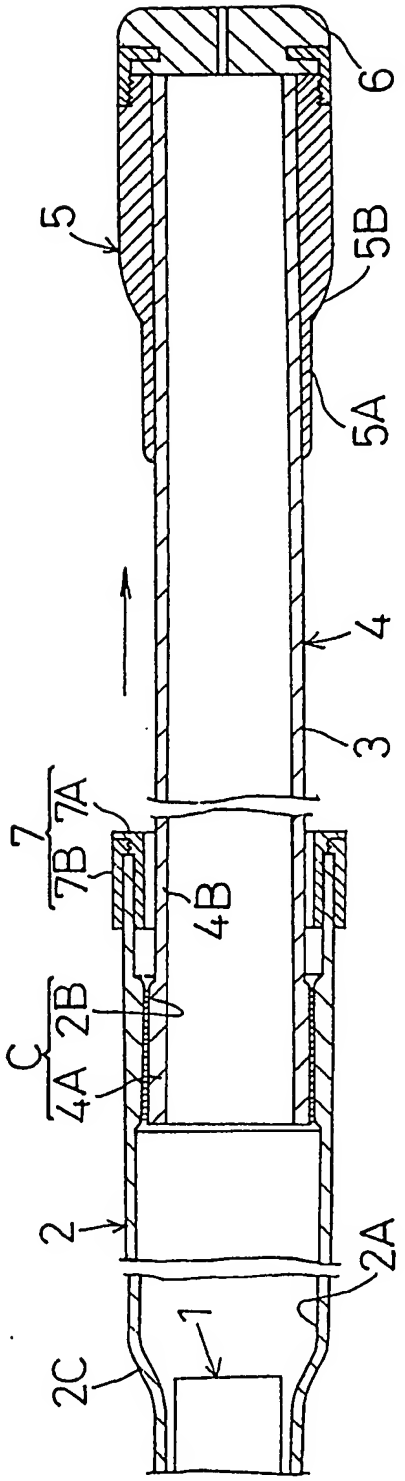

6
5
5B
7
7A
7B
5A
B
7a
2B
2
4
3
1
2A
A
4A
2C
1

FIG.1(b)


6
5
5B
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7A
7B
4B
C
2B
4A
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2A
2C
1

TELESCOPIC BUTT END ROD SECTION

This invention relates to a telescopic butt end section of a fishing rod, and more particularly to a telescopic butt end section having an auxiliary rod section extendible rearwardly therefrom for substantially increasing a total rod length. The auxiliary rod section is drawn out rearwardly to an extended position when bringing a hooked fish toward the angler, and is retracted when landing the fish.

In a conventional telescopic butt end section of a fishing rod as noted above, an auxiliary rod section is mounted to surround the butt end section to be extendible rearwardly therefrom. One such construction is disclosed in Japanese Utility Publication Kokai No. 64(1979)-49071.

In such a telescopic rod construction, it is considered desirable to set a stroke of telescopic extension and retraction to about 70cm. This enables the angler to extend or retract the auxiliary rod section in a single action of stretching his or her arms. Consequently, the auxiliary rod section has a length exceeding 70cm. When switching the auxiliary

rod section from a retracted position to an extended position, the angler keeps holding a rear end of the auxiliary rod section with one hand in a usual fishing operation, and extends the auxiliary rod section by placing the other hand on a forward position of the butt end section lying forwardly of a forward end of the auxiliary rod section.

As a result, the two hands are already a long distance apart before extending the auxiliary rod section. It is difficult to move the auxiliary rod section through the necessary stroke in one action. The angler must move his or her hand from the rear end to the forward end of auxiliary rod section, and take a second action to extend the auxiliary rod section rearwardly. This re-gripping action is detrimental to the speediness required for bringing a fish toward the angler. Thus, the prior construction is inconvenient, and tends to swing a tip end of the rod which may allow the fish to escape.

In addition, since the auxiliary rod section has a large diameter for surrounding the butt end section, the auxiliary rod section is not easy to grip for a quick extending operation.

An object of the present invention is to provide

a telescopic butt end section of a fishing rod, which is convenient to use and has an auxiliary rod section attached to the butt end section through an improved structure to be extendible and retractable with ease.

The above object is fulfilled, according to the present invention, by a telescopic butt end rod section comprising an auxiliary rod section inserted into the butt end section through a rear end opening thereof to be switchable between a contained position in the butt end section and an extended position drawn rearwardly out of the butt end section; wherein the auxiliary rod section is maintained in the contained position by at least one of a first engagement for providing a tight contact between an outer periphery of a forward end region of the auxiliary rod section and an inner periphery of a forward end region of the butt end section, and a second engagement for providing a tight contact between an outer periphery of a rearward end region of the auxiliary rod section and an inner periphery of a rearward end region of the butt end section, and maintained in the extended position by a third engagement for providing a tight contact between the outer periphery of the forward end region of the auxiliary rod section and an inner periphery of a rearward end region of the butt end section.

The above construction has the following functions and effects:

The angler may keep one of his or her hands on the rear end of the auxiliary rod section maintained in the contained position by one of the first engagement and second engagement, and place the other hand on the rear end of the butt end section. Then, the angler may draw the auxiliary rod section rearwardly to the extended position in a single extending action. The auxiliary rod section is maintained in the extended position by the third engagement.

Since the auxiliary rod section is inserted into the butt end section through the rear end opening of the latter, the rear end of the auxiliary rod section in the contained position lies close to the rear end of the butt end section. The angler need not move the hand placed on the rear end of the auxiliary rod section in a normal fishing situation.

Consequently, the angler is able to extend the fishing rod as desired during a series of operations to bring a fish toward the angler or struggle with the fish. The butt end rod section thus enables a smooth fishing control.

Other features and advantages of the present invention will be apparent from the following

description.

The invention will be described by way of example with reference to the accompanying drawings, in which:-

Fig. 1 (a) is a side view in vertical section of a fishing rod in a retracted position according to one embodiment of the present invention, and

Fig. 1 (b) is a side view in vertical section of the fishing rod in an extended position.

A telescopic butt end section of a fishing rod according to an embodiment of the present invention will be described in detail with reference to the drawings.

Figs. 1 (a) and (b) show a fishing rod comprising a plurality of add-on rod sections having no line guides. A forward rod section 1 is mounted in a butt end section 2 to be extendible therefrom through a forward opening of the butt end section 2. The butt end section 2 also contains an auxiliary rod section 4 extendible rearwardly through a rear opening thereof.

As shown in Fig. 1 (a), the auxiliary rod section 4 includes a shank 3 tapered toward a rear end thereof and defining a boss 4A at a forward end thereof. The boss 4A has a flocked outer peripheral surface. The shank 3 has a butt member 5 fixedly mounted on the rear end thereof, with an end plug 6 screwed to the

butt member 5. The butt member 5 has a small diameter contact 5A on a forward portion thereof, and a shoulder 5B formed rearwardly of the contact 5A. The angler may hold the shoulder 5B to draw out the auxiliary rod section 4 rearwardly.

The butt end section 2 includes a sharp inclination 2C on a forward position thereof. Thus, the butt end section 2 has a rearward portion of larger inside diameter for accommodating the auxiliary rod section 4 than a forward portion. The auxiliary rod section 4 defines a forward end opening having an inside diameter larger than an outside diameter of a rear end opening of the forward rod section 1. This structure allows the forward rod section 1 to move smoothly into the auxiliary rod section 4. The butt end section 2 includes a constricted portion 2B on an inner surface adjacent the rear end thereof. When the auxiliary rod section 4 is contained in the butt end section 2, the boss 4A of the auxiliary rod section 4 is pressed against an inner wall 2A adjacent the sharp inclination 2C of the butt end section 2. Thus, the inner wall 2A and the boss 4A constitute a first engagement A for fixing the auxiliary rod section 4 to a contained position. The flock on the boss 4A enhances smoothness, tightness and stability of contact between the boss 4A and inner wall 2A.

With the above construction, the forward rod section 1 may be contained with no problem although the auxiliary rod section 4 is contained in the butt end section 2. The portion of the butt end section 2 with a correspondingly enlarged diameter may be gripped by the angler at a fishing time. This portion of the butt end section 2 may have an enlarged diameter to an extent of allowing easy gripping while allowing an inside diameter of a forward opening of the auxiliary rod section 4 to be larger than an outside diameter of a rear opening of the forward rod section 1. Thus, the butt end section 2 does not give a heavy feel to tire the angler.

A retainer 7 is mounted around the rear opening of the butt end section 2 to contact the boss 4A of the auxiliary rod section 4, thereby to prevent the latter from falling off the butt end section 2. The retainer 7 includes an inner peripheral surface 7a acting as a rearward inner peripheral surface of the butt end section 2. When the auxiliary rod section 4 is contained in the butt end section 2, the inner peripheral surface 7a presses on the small diameter contact 5A of the butt member 5, to fix the auxiliary rod section 4 in the contained position. The small diameter contact 5A and rearward inner peripheral surface 7a constitute a second engagement B.

The retainer 7 is formed of an inner member 7A and an outer member 7B. For attaching the retainer 7 to the rear opening of the butt end section 2, the outer member 7B is secured to an outer peripheral surface of the rear end of the butt end section 2, the shank 3 without the butt member 5 and end plug 6 attached thereto is inserted into the butt end section 2, the inner member 7A is screwed to the outer member 7B, a suitable adhesive is used to fix the inner member 7A to the butt end section 2, and then the butt member 5 and end plug 6 are attached to the auxiliary rod section 4. The inner member 7A, butt member 5 and end plug 6 may be attached after painting the shank 3.

When the angler draws out the auxiliary rod section 4 with a hand placed on the shoulder 5B of the butt member 5, the boss 4A of the butt end section 2 moves into tight contact with the constricted portion 2B of the butt end section 2 to fix the auxiliary rod section 4 in an extended position. At this time, the boss 4A and constricted portion 2B act as a third engagement C.

The above embodiment may be modified as follows:

(1) Only one of the first engagement A and second engagement B may be provided to fix the auxiliary rod section 4 in the contained position.

(2) The boss 4A need not have the flock or other

soft material.

(3) The boss 4A may be formed integral with or separately from the auxiliary rod section 4. Also, the constricted portion 2B may be formed integral with or separately from the butt end section 2.

(4) When the auxiliary rod section 4 is extended as shown in Fig. 1 (b), a small diameter portion 4B disposed slightly rearwardly of the boss 4A of the auxiliary rod section 4 may be in tight contact with the inner peripheral surface 7a of the inner member 7A of the retainer 7. In this case, the constricted portion 2B need not be formed.

CLAIMS

1. A telescopic butt end rod assembly comprising:

a butt end section:

an auxiliary rod section inserted into said butt end section through a rear end opening thereof to be switchable between a contained position in said butt end section and an extended position drawn rearwardly out of said butt end section;

a first engagement for providing a tight contact between an outer periphery of a forward end region of said auxiliary rod section and an inner periphery of a forward end region of said butt end section;

a second engagement for providing a tight contact between an outer periphery of a rearward end region of said auxiliary rod section and an inner periphery of a rearward end region of said butt end section; and

a third engagement for providing a tight contact between said outer periphery of said forward end region of said auxiliary rod section and an inner periphery of a rearward end region of said butt end section;

wherein said auxiliary rod section is maintained in said contained position by at least one of said first engagement and said second engagement. and maintained in said extended position by said third

engagement.

2. A telescopic butt end rod assembly as claimed in claim 1, wherein said inner periphery of said forward end region of said butt end section forming part of said first engagement has inner and outer surfaces of enlarged diameters to enlarge a portion of said butt end section for accommodating said auxiliary rod section, whereby said butt end section includes a rearward portion having a larger inside diameter than a forward portion, said auxiliary rod section defining a forward end opening having an inside diameter larger than an outside diameter of a rear end opening of a forward rod section.

3. A telescopic butt end rod assembly as claimed in claim 1 or 2, further comprising a retainer mounted around said rear end opening of said butt end section for contacting a boss formed on said outer periphery of said forward end region of said auxiliary rod section, thereby to prevent said auxiliary rod section from falling off said butt end section.

4. A telescopic butt end rod assembly as claimed in claim 3, wherein, when said auxiliary rod section is extended, a small diameter portion disposed slightly

rearwardly of said boss of said auxiliary rod section is in tight contact with an inner peripheral surface of an inner member of said retainer.

5. A telescopic butt end rod assembly substantially as herein described with reference to the accompanying drawings.

Patents Act 1977
Examiner's report to the Comptroller under Section 17 (The Search Report)

Application number: GB 9216540.6

Relevant Technical fields

(i) UK Cl (Edition K) A1A, A28

(ii) Int Cl (Edition 5) A01K

Search Examiner: R F PHAROAH

Databases (see over)

(i) UK Patent Office

(ii)

Date of Search: 16 DECEMBER 1992

Documents considered relevant following a search in respect of claims 1-5

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
X	GB A 2236038 (C McMANUS) See page 3, lines 10-14	1, 3, 4
X	GB A 2131261 (MANN AVIATION)	1, 3
X	GB 577615 (H EGGINGTON)	1, 3

Category	Identity of document and relevant passages	Relevant to claim(s.

Categories of documents

X: Document indicating lack of novelty or of inventive step.

Y: Document indicating lack of inventive step if combined with one or more other documents of the same category.

A: Document indicating technological background and/or state of the art.

P: Document published on or after the declared priority date but before the filing date of the present application.

E: Patent document published on or after, but with priority date earlier than, the filing date of the present application.

&: Member of the same patent family, corresponding document.

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